PTO-1542
(4-85)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICE

Called 13:05 pm
12/10/92

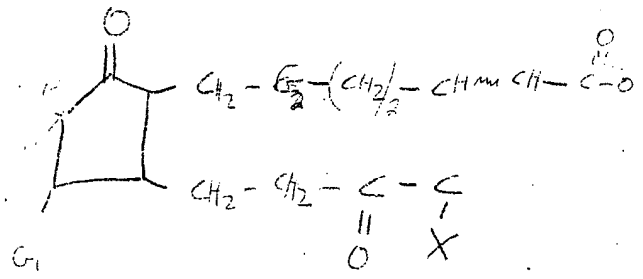
ONLINE SEARCH REQUEST FORM

USER Sandra SERIAL NUMBER 08/552,230

ART UNIT 1501 PHONE 703 305 1235 DATE 12-10-92

Please give a detailed statement of requirements. Describe as specifically as possible the subject matter to be searched. Define any terms that may have special meaning. Give examples or relevant citations, authors, or keywords, if known.

You may include a copy of the broadest and or relevant claim(s).



G_1 = -OH $-CH_2-OH$

G_2 = $-CH_2-$ $-C-$

STAFF USE ONLY

COMPLETED 12/10/92
SEARCHER Jan
ONLINE TIME 15 (in minutes) TOTAL TIME 61
NO. OF DATABASES 4

SYSTEMS
✓ CAS ONLINE Reg / Ca / Caold / Caplus.
___ DARC/QUESTEL
___ DIALOG
___ SDC
___ OTHER

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=> fil reg
FILE 'REGISTRY' ENTERED AT 11:06:36 ON 10 DEC 92
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 1992 American Chemical Society (ACS)

STRUCTURE FILE UPDATES:   4 DEC 92   HIGHEST RN 144785-96-6
DICTIONARY FILE UPDATES: 10 DEC 92   HIGHEST RN 144785-96-6

=> d stat que l5
L3              STR
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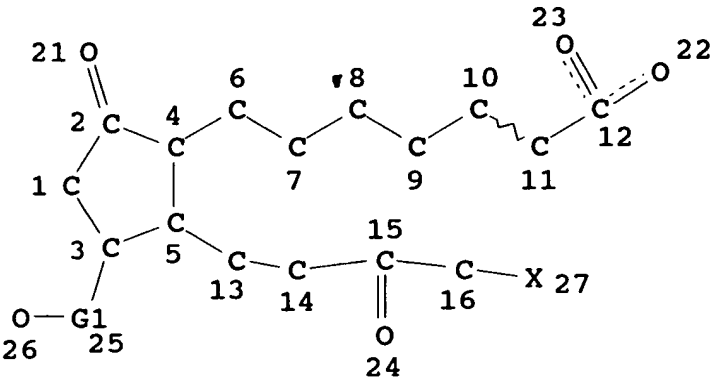


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REP G1=(0-1) C
NODE ATTRIBUTES: NONE

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  23
L5            15 SEA FILE=REGISTRY SSS FUL L3

100.0% PROCESSED     79 ITERATIONS                                15 ANSWERS
SEARCH TIME: 00.00.05


=>
=>
=> d his l5-

     (FILE 'REGISTRY' ENTERED AT 10:59:39 ON 10 DEC 92)
L5            15 S L3 FUL
                 SAVE L5 GERSTL925/A

     FILE 'CA' ENTERED AT 11:05:52 ON 10 DEC 92
L6            13 S L5 OR L5/D

     FILE 'CAOLD' ENTERED AT 11:06:00 ON 10 DEC 92
L7             0 S L5

     FILE 'BIOSIS' ENTERED AT 11:06:14 ON 10 DEC 92
L8             0 S L5
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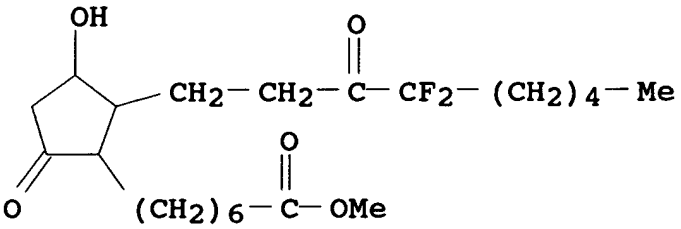
FILE 'REGISTRY' ENTERED AT 11:06:36 ON 10 DEC 92

=>
=>
=> d ide can l5 1-15

L5 ANSWER 1 OF 15 COPYRIGHT 1992 ACS
RN 139023-32-8 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-20-methyl-9,15-dioxo-, methyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C22 H36 F2 O5
SR CA
LC CA
DES 4:11A.PROST

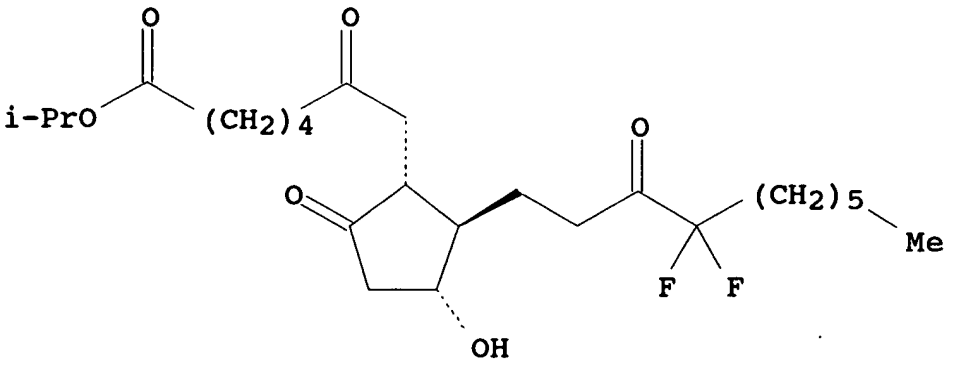


1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA116(18):181136f

L5 ANSWER 2 OF 15 COPYRIGHT 1992 ACS
RN 138685-09-3 REGISTRY
CN Cyclopentaneheptanoic acid, 2-(4,4-difluoro-3-oxodecyl)-3-hydroxy-.epsilon.,5-dioxo-, 1-methylethyl ester, [1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)
MF C25 H40 F2 O6
SR CA
LC CA
DES *

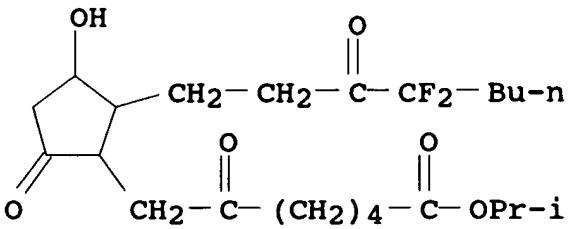
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(3):21186q

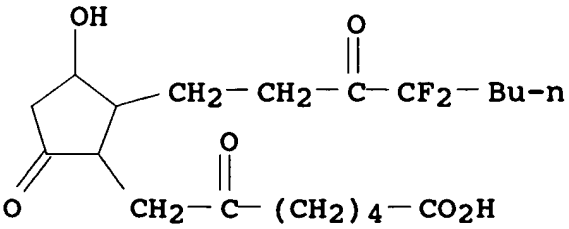
L5 ANSWER 3 OF 15 COPYRIGHT 1992 ACS
RN 138685-08-2 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-6,9,15-trioxo-, 1-methylethyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C23 H36 F2 O6
SR CA
LC CA
DES 4:11A.PROST



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(3):21186q

L5 ANSWER 4 OF 15 COPYRIGHT 1992 ACS
RN 138685-07-1 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-6,9,15-trioxo-, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C20 H30 F2 O6
SR CA
LC CA
DES 4:11A.PROST

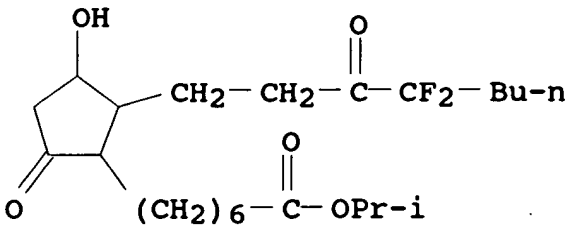


1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(3):21186q

L5 ANSWER 5 OF 15 COPYRIGHT 1992 ACS
RN 137563-84-9 REGISTRY

CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-9,15-dioxo-, 1-methylethyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C23 H38 F2 O5
SR CA
LC CA
DES 4:11A.PROST



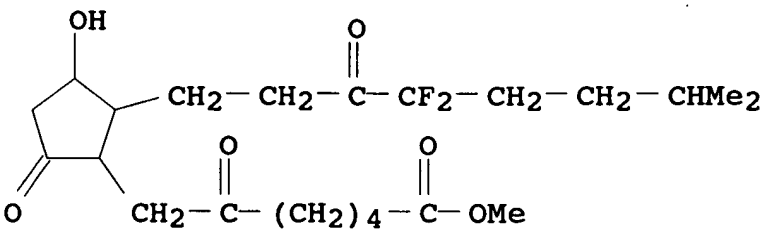
3 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(11):104249p

REFERENCE 2: P CA116(18):181136f

REFERENCE 3: P CA116(7):59071r

L5 ANSWER 6 OF 15 COPYRIGHT 1992 ACS
RN 137433-40-0 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-19-methyl-6,9,15-trioxo-, methyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C22 H34 F2 O6
SR CA
LC CA
DES 4:11A.PROST



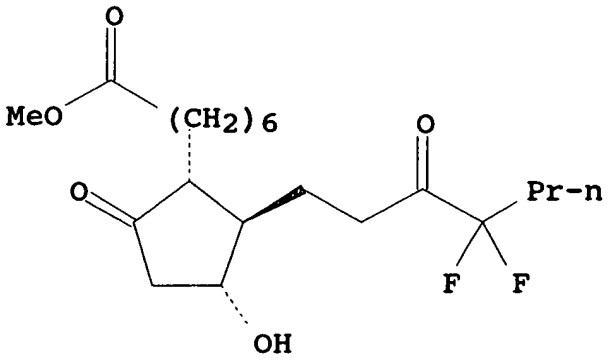
1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA115(25):270690d

L5 ANSWER 7 OF 15 COPYRIGHT 1992 ACS
RN 136790-82-4 REGISTRY
CN Cyclopentaneheptanoic acid, 2-(4,4-difluoro-3-oxoheptyl)-3-hydroxy-5-oxo-, methyl ester, [1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)

MF C20 H32 F2 O5
SR CA
LC CA
DES *

Absolute stereochemistry.

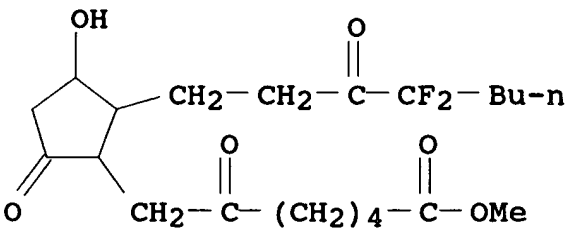


2 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA115(19):198532j

REFERENCE 2: P CA115(19):198530g

L5 ANSWER 8 OF 15 COPYRIGHT 1992 ACS
RN 136790-80-2 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-6,9,15-trioxo-, methyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C21 H32 F2 O6
SR CA
LC CA
DES 4:11A.PROST



5 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(3):21186q

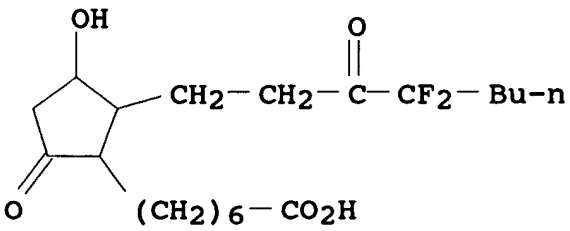
REFERENCE 2: P CA116(7):59071r

REFERENCE 3: P CA115(25):270690d

REFERENCE 4: P CA115(19):198532j

REFERENCE 5: P CA115(19):198530g

L5 ANSWER 9 OF 15 COPYRIGHT 1992 ACS
RN 136790-76-6 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-9,15-dioxo-, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C20 H32 F2 O5
SR CA
LC CA, CAPREVIEWS
DES 4:11A.PROST



6 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(11):104249p

REFERENCE 2: P CA116(18):181136f

REFERENCE 3: P CA116(7):59071r

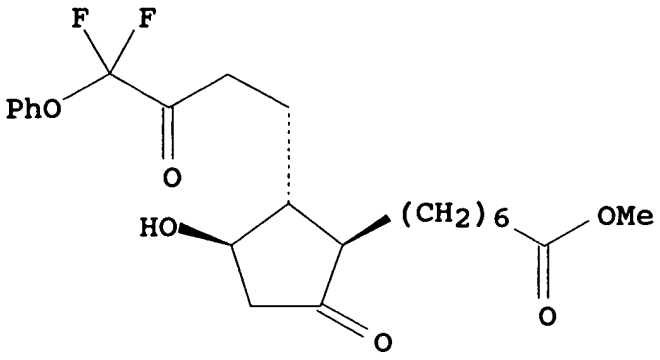
REFERENCE 4: P CA115(25):270690d

REFERENCE 5: P CA115(19):198532j

REFERENCE 6: P CA115(19):198530g

L5 ANSWER 10 OF 15 COPYRIGHT 1992 ACS
RN 127545-43-1 REGISTRY
CN Cyclopentaneheptanoic acid, 2-(4,4-difluoro-3-oxo-4-phenoxybutyl)-3-hydroxy-5-oxo-, methyl ester, [1R-(1.alpha.,2.beta.,3.alpha.)]- (9CI) (CA INDEX NAME)
MF C23 H30 F2 O6
SR CA
LC CA
DES *

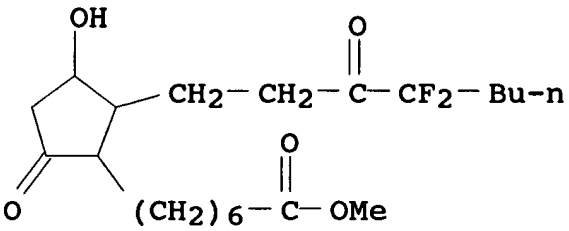
Absolute stereochemistry.



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA113(3):23515n

L5 ANSWER 11 OF 15 COPYRIGHT 1992 ACS
RN 127545-41-9 REGISTRY
CN Prostan-1-oic acid, 16,16-difluoro-11-hydroxy-9,15-dioxo-, methyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C21 H34 F2 O5
SR CA
LC CA, CAPREVIEWS
DES 4:11A.PROST



8 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA117(11):104249p

REFERENCE 2: P CA117(3):21186q

REFERENCE 3: P CA116(18):181136f

REFERENCE 4: P CA116(7):59071r

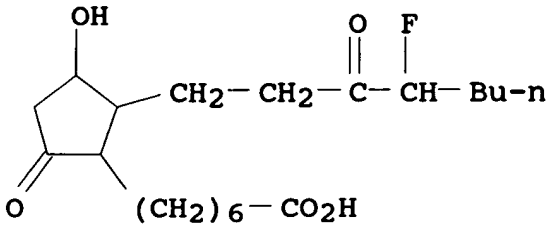
REFERENCE 5: P CA115(25):270690d

REFERENCE 6: P CA115(19):198532j

REFERENCE 7: P CA115(19):198530g

REFERENCE 8: P CA113(3):23515n

L5 ANSWER 12 OF 15 COPYRIGHT 1992 ACS
RN 127525-07-9 REGISTRY
CN Prostan-1-oic acid, 16-fluoro-11-hydroxy-9,15-dioxo-, (11.alpha.)-(9CI) (CA INDEX NAME)
MF C20 H33 F O5
SR CA
LC CA
DES 4:11A.PROST



4 REFERENCES IN FILE CA (1967 TO DATE)

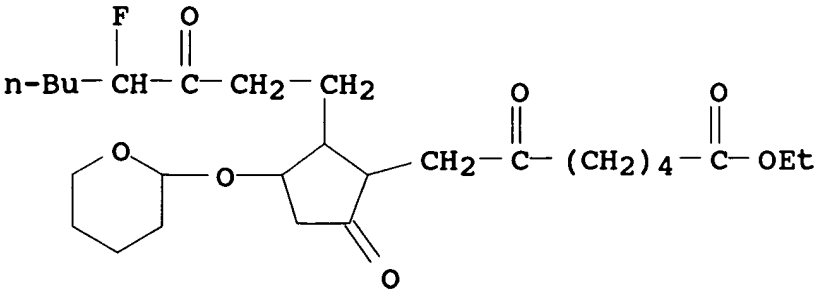
REFERENCE 1: P CA116(7):59071r

REFERENCE 2: P CA115(25):270690d

REFERENCE 3: P CA113(9):71897k

REFERENCE 4: P CA113(1):1159x

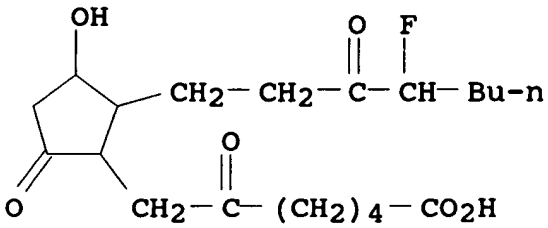
L5 ANSWER 13 OF 15 COPYRIGHT 1992 ACS
RN 118583-22-5 REGISTRY
CN Prostan-1-oic acid, 16-fluoro-6,9,15-trioxo-11-[(tetrahydro-2H-pyran-2-yl)oxy]-, ethyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C27 H43 F O7
SR CA
LC CA
DES 4:11A.PROST



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA110(19):172990d

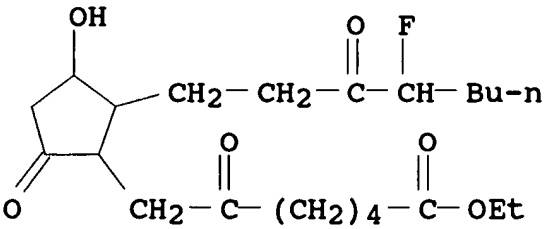
L5 ANSWER 14 OF 15 COPYRIGHT 1992 ACS
RN 118565-87-0 REGISTRY
CN Prostan-1-oic acid, 16-fluoro-11-hydroxy-6,9,15-trioxo-, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C20 H31 F O6
SR CA
LC CA
DES 4:11A.PROST



1 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA110(19):172990d

L5 ANSWER 15 OF 15 COPYRIGHT 1992 ACS
RN 118565-46-1 REGISTRY
CN Prostan-1-oic acid, 16-fluoro-11-hydroxy-6,9,15-trioxo-, ethyl ester, (11.alpha.)- (9CI) (CA INDEX NAME)
MF C22 H35 F O6
SR CA
LC CA
DES 4:11A.PROST



6 REFERENCES IN FILE CA (1967 TO DATE)

REFERENCE 1: P CA115(25):270690d

REFERENCE 2: P CA113(13):109325n

REFERENCE 3: P CA113(9):71897k

REFERENCE 4: P CA113(1):1159x

REFERENCE 5: P CA110(23):206626g

REFERENCE 6: P CA110(19):172990d

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=> fil ca
FILE 'CA' ENTERED AT 11:07:52 ON 10 DEC 92
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FILE COVERS 1967 - 28 Nov 92 (921128/ED) VOL 117 ISS 22.
For OFFLINE Prints or Displays, use the ABS or ALL formats to obtain abstract graphic structures. The AB format DOES NOT display structure diagrams.

=>
=>
=> d bib abs hit 16 1-13

L6 ANSWER 1 OF 13 COPYRIGHT 1992 ACS
AN CA117(11):104249p
TI Treatment of inflammatory diseases with 15-keto-prostaglandin compounds, and preparation of and pharmaceutical compositions containing these compounds
AU Ueno, Ryuji
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 54 pp.
PI EP 467564 A2 22 Jan 1992
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 91-306069 3 Jul 1991
PRAI JP 90-184963 10 Jul 1990
IC ICM A61K031-557
SC 1-7 (Pharmacology)
SX 26, 63
DT P
CO EPXXDW
PY 1992
LA Eng
AN CA117(11):104249p
AB 15-Ketoprostaglandin derivs. are prepd. for the manuf. of a medicament for treatment of inflammatory diseases. Thus, 13,14-dihydro-15-keto-20-ethyl-PGF2.alpha. iso-Pr ester (I) had activity against exptl. conjunctivitis in rats. An eyedrop formulation of I is given, as are injection, capsule, etc. formulations of other ketoprostaglandin derivs. Prepn. of a variety of ketoprostaglandins, e.g. 16,16-difluoro-13,14-dihydro-15-keto-PGE1 Me ester, is described.
IT 136249-12-2 136790-88-0 136790-89-1 137492-12-7 137563-80-5

137563-81-6 **137563-84-9** 138626-66-1 140407-81-4
(NMR spectral data for, antiinflammatory prostaglandin synthesis in relation to)
IT **127545-41-9P** **136790-76-6P** 136790-84-6P
137563-66-7P 138684-87-4P 138684-93-2P 138685-02-6P
140407-72-3P 140407-76-7P 140407-77-8P 140407-79-0P
140407-80-3P
(prepn. of, for antiinflammatory)

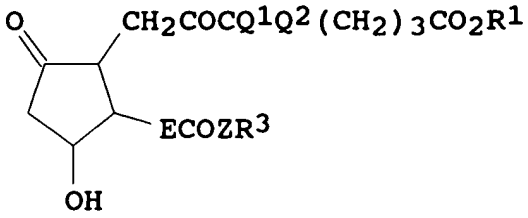
L6 ANSWER 2 OF 13 COPYRIGHT 1992 ACS
AN CA117(3):21186q
TI Treatment of cataract with 15-keto-prostaglandin compounds
AU Ueno, Ryuji
CS Ueno Fine Chemical Industries, Ltd.
LO Japan
SO Eur. Pat. Appl., 43 pp.
PI EP 453127 A2 23 Oct 1991
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 91-302925 3 Apr 1991
PRAI JP 90-90895 4 Apr 1990
JP 90-221646 22 Aug 1990
JP 91-29310 29 Jan 1991
IC ICM A61K031-557
ICS A61K009-06
SC 2-9 (Mammalian Hormones)
SX 26, 63
DT P
CO EPXXDW
PY 1991
LA Eng
OS MARPAT 117:21186
AN CA117(3):21186q
AB 15-Ketoprostaglandins are prepd. for cataract treatment. Twelve prepn. examples are given, as are injectable, powder, capsule, and ophthalmic soln. formulations. The prostaglandin derivs. of the invention inhibited exptl. cataract in rats.
IT 118583-21-4 118696-49-4 124548-58-9 137563-78-1 138626-66-1
138685-08-2 **138685-09-3**
(cataract treatment with)
IT **138685-07-1**
(injection soln. pharmaceutical of, for cataract treatment)
IT **136790-80-2**
(powder oral pharmaceutical of, for cataract treatment)
IT 118565-93-8P **127545-41-9P** 138684-84-1P 138684-87-4P
138684-93-2P 138684-94-3P 138684-98-7P 138685-02-6P
138685-06-0P
(prepn. of, for cataract treatment)

L6 ANSWER 3 OF 13 COPYRIGHT 1992 ACS
AN CA116(18):181136f
TI Preparation of 15-ketoprostaglandin compounds for pharmaceuticals for pancreatic disease treatment
AU Ueno, Ryuji

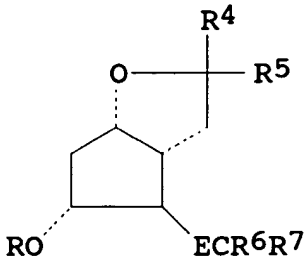
CS Hayashibara Biochemical Laboratories, Inc.
LO Japan
SO Eur. Pat. Appl., 35 pp.
PI EP 455448 A2 6 Nov 1991
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 91-303856 29 Apr 1991
PRAI JP 90-116139 1 May 1990
IC ICM A61K031-557
SC 63-6 (Pharmaceuticals)
SX 1, 26
DT P
CO EPXXDW
PY 1991
LA Eng
AN CA116(18):181136f
AB 15-Ketoprostaglandin derivs. are prepd. for manuf. of medicaments for treatment of pancreatic disease. Prepn. of a variety of the derivs., e.g. 13,14-dihydro-15-keto-16,16-difluoro PGE Me ester, is given. Injection, oral powder, and capsule formulations are included. 13,14-Dihydro-15-keto-16,16-difluoro PGE2 had pancreatic function-improving activity in animals with exptl. acute pancreatitis.
IT 120373-37-7 136790-83-5 **139023-32-8**
(capsule pharmaceutical of, for pancreatic disease treatment)
IT **127545-41-9P 136790-76-6P** 136790-84-6P
137563-66-7P
(prepn. of, for pharmaceutical, for pancreatic disease treatment)
IT 136249-12-2P 136790-89-1P 137492-12-7P 137563-80-5P
137563-81-6P **137563-84-9P** 138626-66-1P 139023-34-0P
(prepn. of, pharmacetuical compn. contg., for pancreatic disease treatment)

L6 ANSWER 4 OF 13 COPYRIGHT 1992 ACS
AN CA116(7):59071r
TI Preparation and formulation of 15-ketoprostaglandins as cerebrovascular agents
AU Ueno, Ryuji; Osama, Hiroyoshi; Oda, Tomio
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 51 pp.
PI EP 435443 A2 3 Jul 1991
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 90-312642 21 Nov 1990
PRAI JP 89-303839 22 Nov 1989
JP 90-7611 17 Jan 1990
JP 90-85439 30 Mar 1990
IC ICM A61K031-557
SC 26-3 (Biomolecules and Their Synthetic Analogs)
SX 1, 63
DT P
CO EPXXDW
PY 1991
LA Eng

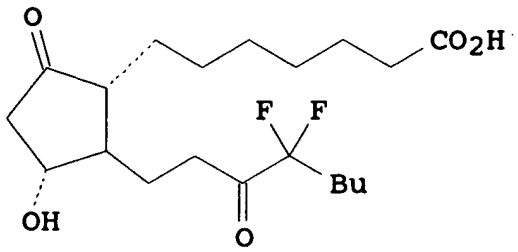
OS MARPAT 116:59071
AN CA116(7):59071r
GI



I



II



III

AB Title compds., e.g., I [E = CH2CH2, CH:CH; Q1 = halo; Q2 = H, halo; R1 = H, alkyl; R3 = (halo)alkyl, (alkyl)cycloalkyl, (un)substituted aryl, aryloxy; Z = bond, alkylene] were prepd. Thus, (1S,5R,6R,7R)-6-hydroxymethyl-7-tetrahydropyranyloxy-2-oxabicyclo[3.3.0]octan-3-one was oxidized and the aldehyde product condensed with (MeO)2P(O)CH2COCF2Bu to give octenylbicyclooctanone II [E = (E)-CH:CH, R = tetrahydropyranyl, R4R5 = R7R7 = O] which was converted in 3 steps to II (E = CH2CH2, R4 = R6 = OH, R5 = R7 = H). The latter was condensed with Ph3P+(CH2)4CO2H Br- and the esterified product oxidized with Collins reagent to give, after deprotection and hydrogenation, title compd. III which gave a 50% increase in blood, flow in rat hippocampus tissue 20 min after i.v. administration of 1.0 mg/kg.

IT 118583-21-4 120373-17-3 120373-24-2 122730-78-3
127525-07-9 127545-41-9 129763-67-3
131840-73-8 136249-12-2 **136790-76-6 136790-80-2**
136790-84-6 136790-88-0 137563-66-7 137563-78-1 137563-79-2
137563-80-5 137563-81-6 137563-82-7 137563-83-8
137563-84-9 137563-85-0 138626-66-1
(cerebrovascular activity of)

IT **127545-41-9P 136790-76-6P** 137563-66-7P
137563-77-0P
(prepn. of, as cerebrovascular agent)

L6 ANSWER 5 OF 13 COPYRIGHT 1992 ACS

AN CA115(25):270690d
TI Treatment of hepatobiliary disease with 15-ketoprostaglandin derivatives
AU Ueno, Ryuji; Osama, Hiroyoshi
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 25 pp.
PI EP 424156 A2 24 Apr 1991
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 90-311457 18 Oct 1990
PRAI JP 89-274606 20 Oct 1989
IC ICM A61K031-557
SC 1-9 (Pharmacology)
SX 26, 63
DT P
CO EPXXDW
PY 1991
LA Eng
AN CA115(25):270690d
AB 15-Ketoprostaglandin derivs. are used to manuf. a medicament for treatment of hepatobiliary disease. Prepn. in 8 steps of Me 16,16-difluoro-13,14-dihydro-15-keto-PGE is described. Oral and injection formulations of the prostaglandin derivs. of the invention are given, as are animal test data.
IT 12619-70-4D, Cyclodextrin, di-Me ether, adduct with PGE derivs. 118565-25-6D, adduct with di-Me cyclodexrin **118565-46-1** 118565-86-9 120373-24-2 122730-87-4 **127525-07-9** 136790-89-1 137492-12-7
(for hepatobiliary disease treatment)
IT 118565-93-8 120373-37-7 **136790-76-6 136790-80-2 137433-40-0**
(hepatobiliary disease pharmaceutical of)
IT **127545-41-9P**
(prepn. of, for hepatobiliary disease treatment and pharmaceutical)

L6 ANSWER 6 OF 13 COPYRIGHT 1992 ACS
AN CA115(19):198532j
TI Treatment of pulmonary dysfunction with 15-keto-prostaglandin compounds and their preparation and pharmaceutical compositions containing them
AU Ueno, Ryuji; Osama, Hiroyoshi
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 23 pp.
PI EP 430552 A2 5 Jun 1991
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 90-312641 21 Nov 1990
PRAI JP 89-303841 22 Nov 1989
IC ICM A61K031-557
SC 1-9 (Pharmacology)
SX 26, 63
DT P

CO EPXXDW
PY 1991
LA Eng
AN CA115(19):198532j
AB 15-Ketoprostaglandins are used for the manuf. of a medicament for treatment of a pulmonary dysfunction. Prepn. of 16,16-difluoro-13,14-dihydro-15-keto PGE1 (I) and of I Me ester are given, as is an injection formulation contg. I. Effectiveness of the ketoprostaglandins of the invention was detd. in animal testing. Prepn. and formulations for ketoprostaglandins other than I are also included.
IT **127545-41-9P 136790-76-6P**
(prepn. of, for pulmonary pharmaceutical)
IT 118565-26-7 118565-93-8 **136790-80-2** 136790-81-3
136790-82-4 136790-83-5
(pulmonary pharmaceutical of)

L6 ANSWER 7 OF 13 COPYRIGHT 1992 ACS
AN CA115(19):198530g
TI Treatment of cardiac dysfunction with 15-keto-prostaglandin compounds and their preparation and pharmaceutical compositions containing them
AU Ueno, Ryuji; Osama, Hiroyoshi
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 21 pp.
PI EP 430551 A2 5 Jun 1991
DS R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 90-312640 21 Nov 1990
PRAI JP 89-303840 22 Nov 1989
IC ICM A61K031-557
SC 1-8 (Pharmacology)
SX 26, 63
DT P
CO EPXXDW
PY 1991
LA Eng
AN CA115(19):198530g
AB 15-Ketoprostaglandins are used for the manuf. of a medicament for treatment of cardiac dysfunction. Thus, 13,14-dihydro-15-keto-16,16-difluoro PGE1 (I) (prepn. given) increased contraction of guinea pig heart atria, compared to controls receiving vehicle alone. An injection formulation contg. I is given. Other ketoprostaglandins are prepd. and tested and formulations given.
IT 118565-26-7 118565-93-8 **136790-80-2** 136790-81-3
136790-82-4 136790-83-5
(cardiac pharmaceutical of)
IT **127545-41-9P 136790-76-6P**
(prepn. of, for cardiac pharmaceutical)

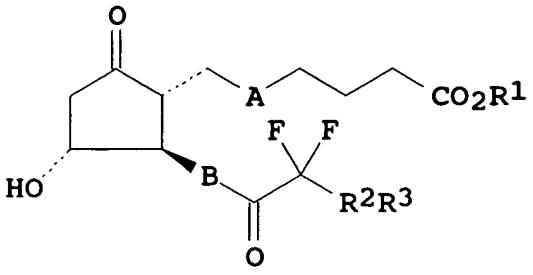
L6 ANSWER 8 OF 13 COPYRIGHT 1992 ACS
AN CA113(13):109325n
TI 15-Keto-prostaglandin E ester hypersphyxia causing composition

AU Ueno, Ryuzo; Ueno, Ryuji; Oda, Tomio
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 26 pp.
PI EP 343904 A1 29 Nov 1989
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 89-305163 22 May 1989
PRAI JP 88-125303 23 May 1988
JP 88-182281 20 Jul 1988
IC ICM A61K031-557
SC 1-8 (Pharmacology)
SX 2, 63
DT P
CO EPXXDW
PY 1989
LA Eng
OS MARPAT 113:109325
AN CA113(13):109325n
AB 15-Keto-PGEs ester compns. cause hypersphyxia, effective in recovering blood pressure and heart rate in, e.g., hemorrhage shock or hyperventilation. I.v. injection in rats of a no. of 14-keto-PGE esters exhibit a blood pressure increasing effect instead of a decreasing effect shown with other prostaglandins. The esters also exhibit pos. chronotropic effects. Examples of pharmaceuticals contg. the compds. are given.
IT 363-23-5, 13,14-Dihydro-15-keto-PGE2 5094-14-4, 13,14-Dihydro-15-keto-PGE1 93036-49-8, 13,14-Dihydro-6,15-diketo-PGE1 118565-22-3 118565-24-5 118565-25-6, 13,14-Dihydro-6,15-diketo-19-methyl-PGE1 ethyl ester 118565-26-7, 13,14-Dihydro-6,15-diketo-19-methyl-PGE1 methyl ester 118565-27-8 118565-28-9 118565-31-4, 13,14-Dihydro-15-keto-PGE2 ethyl ester 118565-33-6, 13,14-Dihydro-15-keto-PGE2 methyl ester 118565-34-7, 13,14-Dihydro-15-keto-PGE2 n-propyl ester 118565-37-0 118565-38-1 118565-42-7 118565-43-8 **118565-46-1** 118565-58-5 118565-63-2, (.+-.) 13,14-Dihydro-6,15-diketo-PGE1 ethyl ester 118565-64-3, 13,14-Dihydro-6,15-diketo-PGE1 methyl ester 118565-66-5 118565-69-8 118565-77-8, 13,14-Dihydro-6,15-diketo-PGE1 ethyl ester 118565-86-9 118583-21-4 118583-25-8 118583-32-7 118583-41-8 118583-48-5 118583-49-6 118628-13-0 118696-35-8 118696-39-2, 13,14-Dihydro-6,15-diketo-PGE1 n-butyl ester 118696-42-7, 13,14-Dihydro-15-keto-PGE2 n-butyl ester 118696-46-1, 13,14-Dihydro-15-keto-PGE2 benzyl ester 118696-48-3 118696-49-4 118696-50-7 118696-51-8 118696-52-9 118696-59-6 118696-60-9, 13,14-Dihydro-15-keto-20-ethyl-PGE2 ethyl ester 118696-61-0, 13,14-Dihydro-15-keto-20-ethyl-PGE1 methyl ester 118696-62-1 118696-63-2 118696-70-1 118696-72-3, 13,14-Dihydro-6,15-diketo-16,16-dimethyl-PGE1 ethyl ester 118720-65-3 120414-35-9, 13,14-Dihydro-15-keto-PGE2 hydroxyethyl ester 120414-36-0 120414-37-1 120414-38-2 120414-45-1 120445-09-2 120445-10-5, 13,14-Dihydro-15-keto-.DELTA.2-PGE2-methyl ester 124600-33-5 128678-58-0 129041-43-6
(hypersphyxia activity of, for pharmaceuticals)

L6 ANSWER 9 OF 13 COPYRIGHT 1992 ACS
AN CA113(9):71897k
TI 15-Ketoprostaglandin E derivatives as bronchodilators
AU Ueno, Ryuzo; Ueno, Takashi; Oda, Tomio
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Jpn. Kokai Tokkyo Koho, 23 pp.
PI JP 01287028 A2 17 Nov 1989 Heisei
AI JP 88-115409 11 May 1988
IC ICM A61K031-557
SC 2-4 (Mammalian Hormones)
DT P
CO JKXXAF
PY 1989
LA Japan
AN CA113(9):71897k
AB 15-Ketoprostaglandin E derivs. are bronchodilators. The bronchodilating activities (IC20 and IC50 values) of 64 derivs. of 15-ketoprostaglandin E were studied in vitro using bronchial smooth muscle isolated from the guinea pig. The IC20 and IC50 of 13,14-dihydro-15-keto-PGE were 8 .times. 10-7 and 7 .times. 10-6M, resp.
IT 363-23-5 363-24-6 745-65-3 5094-14-4 26441-05-4
118565-22-3 118565-24-5 118565-25-6 118565-26-7 118565-27-8
118565-28-9 118565-31-4 118565-33-6 118565-34-7 118565-35-8
118565-37-0 118565-38-1 118565-42-7 118565-43-8
118565-46-1 118565-58-5 118565-64-3 118565-66-5
118565-69-8 118565-77-8 118565-86-9 118565-94-9 118565-95-0
118583-32-7 118583-40-7 118583-49-6 118628-13-0 118696-35-8
118696-36-9 118696-39-2 118696-42-7 118696-46-1 118696-48-3
118696-49-4 118696-50-7 118696-51-8 118696-52-9 118696-58-5
118696-59-6 118696-70-1 118696-72-3 118696-73-4 120414-35-9
120414-37-1 120414-38-2 120414-45-1 120445-09-2 120445-10-5
124600-33-5 **127525-07-9** 128678-52-4 128678-53-5
128678-54-6 128678-55-7 128678-57-9 128678-58-0 128678-59-1
128695-96-5
(bronchodilator activity of)

L6 ANSWER 10 OF 13 COPYRIGHT 1992 ACS
AN CA113(3):23515n
TI 16,16-Difluoro-15-oxo-15-deoxyprostaglandin E derivatives as ulcer inhibitors
AU Wakatsuka, Hirohisa; Okegawa, Tadao
CS Ono Pharmaceutical Co., Ltd.
LO Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
PI JP 02032055 A2 1 Feb 1990 Heisei
AI JP 88-178015 19 Jul 1988
IC ICM C07C405-00
ICS A61K031-557
SC 26-3 (Biomolecules and Their Synthetic Analogs)
SX 1

DT P
CO JKXXAF
PY 1990
LA Japan
OS MARPAT 113:23515
AN CA113(3):23515n
GI



I

AB The title derivs. I [R1 = H, C1-8 alkyl; R2 = direct bond, C1-4 alkylene; R3 = C1-8 alkyl, (C1-8 alkyl) C4-7 cycloalkyl, Ph or OPh which may have 1 Cl, CF3, or C1-4 alkyl; A = CH2CH2, cis-CH:CH; B = CH2CH2, trans-CH:CH; B = CH2CH2 when A = cis-CH:CH], their cyclodextrin inclusion compds., or nontoxic salts of I (R1 = H), useful as strong ulcer inhibitors with weak antihypertensive, diuretic, blood platelet aggregation-inhibiting, bronchodilatory activities, etc. common to prostaglandins, are prepd. A mixt. of 157 mg 11-(tetrahydropyran-2-yl) ether of I (R1 = Me, R2R3 = Bu, A = CH2CH2, B = trans-CH:CH), AcOH, H2O, and THF was stirred at 45.degree. for 2 h to give 113 mg I (R1 = Me, R2R3 = Bu, A = CH2CH2, B = trans-CH:CH), 38 mg of which in AcOEt was treated with Pd/C under H at room temp. for 20 min to give 34 mg I (R1 = Me, R2R3 = Bu, A = B = CH2CH2) (II). II inhibited pentagastrin-induced increase of gastric secretion in rats at ED50 <30 .mu.g/kg/h.

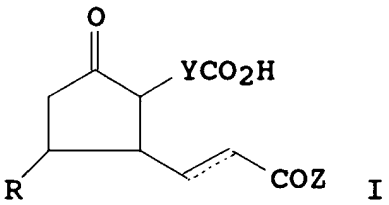
IT 127545-40-8P **127545-41-9P** 127545-42-0P
127545-43-1P
(prepn. of, as ulcer inhibitor)

L6 ANSWER 11 OF 13 COPYRIGHT 1992 ACS
AN CA113(1):1159x
TI Use of 15-ketoprostaglandin E or F compounds for uterine contraction
AU Ryuzo, Ueno; Ryuji, Ueno; Tomio, Oda
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho
LO Japan
SO Eur. Pat. Appl., 33 pp.
PI EP 342003 A1 15 Nov 1989
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 89-304724 10 May 1989
PRAI JP 88-115408 11 May 1988

JP 88-137666 2 Jun 1988
IC ICM A61K031-557
SC 2-3 (Mammalian Hormones)
SX 26, 63
DT P
CO EPXXDW
PY 1989
LA Eng
OS MARPAT 113:1159
AN CA113(1):1159x
AB Prostanoic acid derivs. for manuf. of medicaments to induce uterine contraction and interrupt pregnancy are selected from 15-ketoprostaglandin E compds. (15-keto PGE) and 15-ketoprostaglandin F compds. (15-keto PGF) with the proviso that when the only group, which is unsubstituted n-pentyl, is attached to C15 of the prostanoic acid nucleus and the bond between C5 and C6 is a double bond, than the bond between C13 and C14 is a single bond. 13,14-Dihydro-15-keto-16-desbutyl-16-m-trifluoromethylphenoxy-PGE2 was synthesized from trifluorocresol in 17 steps. 13,14-Dihydro-15-keto-PGF2.alpha. Me ester at 3 .times. 10-5 M induced uterine contractions 98% that of oxytocin (1 mU). Formulations of 13,14-dihydro-15-keto-16-desbutyl-16-m-trifluoromethylphenoxy-PGF2.alpha. are given.
IT 363-23-5 363-24-6, PGE2 551-11-1, PGF2.alpha. 27376-76-7
31753-17-0, PGE2 methyl ester 118565-25-6 118565-26-7
118565-27-8 118565-28-9 118565-31-4 118565-33-6 118565-37-0
118565-38-1 118565-42-7 118565-43-8 **118565-46-1**
118565-58-5 118565-63-2 118565-66-5 118565-77-8 118565-86-9
118565-93-8 118565-94-9 118565-95-0 118583-21-4 118583-32-7
118583-40-7 118583-41-8 118583-49-6 118594-28-8 118628-13-0
118696-35-8 118696-39-2 118696-49-4 118696-60-9 118696-62-1
118696-63-2 118696-70-1 118696-72-3 118720-65-3 120373-16-2
120373-17-3 120373-19-5 120373-20-8 120373-21-9 120373-23-1
120373-24-2 120373-25-3 120373-26-4 120373-27-5 120373-28-6
120373-29-7 120373-30-0 120373-31-1 120373-32-2 120373-33-3
120373-34-4 120373-35-5 120373-36-6 120373-37-7 120373-38-8
120373-40-2 120414-38-2 120442-68-4 122730-78-3 122730-84-1
122730-87-4 127525-06-8 **127525-07-9** 127525-08-0
127525-09-1
(uterine contraction by)

L6 ANSWER 12 OF 13 COPYRIGHT 1992 ACS
AN CA110(23):206626g
TI Fervescence composition comprising 15-ketoprostaglandins E
AU Ueno, Ryuzo; Ueno, Ryuji; Oda, Tomio
CS Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyujo
LO Japan
SO Eur. Pat. Appl., 30 pp.
PI EP 292177 A1 23 Nov 1988
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 88-304206 10 May 1988
PRAI JP 87-119367 15 May 1987
JP 87-235962 17 Sep 1987

IC ICM A61K031-557
SC 2-9 (Mammalian Hormones)
SX 1
DT P
CO EPXXDW
PY 1988
LA Eng
OS MARPAT 110:206626
AN CA110(23):206626g
GI



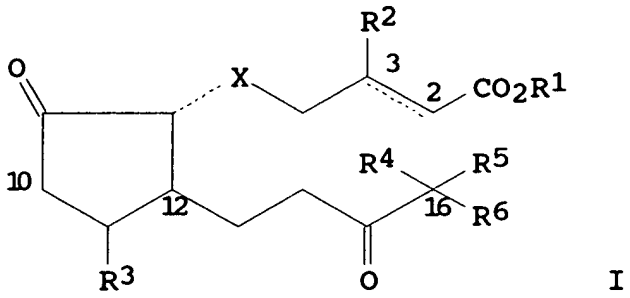
I

AB The 15-keto prostaglandins E [I; R = OH, hydroxyalkyl, alkyl; Y = (un)substituted hydrocarbon moiety; Z = hydrocarbon moiety] and I salts are fervescence agents. I.p. administration of 400 ng 13,14-dihydro-15-keto-PGE2 increased by 0.7.degree. the body temp. of the rat.

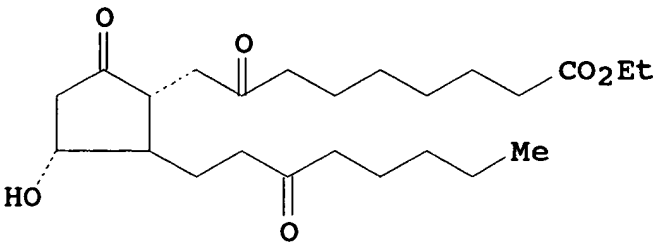
IT 363-23-5 363-24-6 745-65-3 5094-14-4 31753-17-0 93036-49-8
118565-22-3 118565-24-5 118565-25-6 118565-26-7 118565-27-8
118565-28-9 118565-31-4 118565-33-6 118565-34-7 118565-37-0
118565-38-1 118565-42-7 118565-43-8 **118565-46-1**
118565-58-5 118565-63-2 118565-64-3 118565-66-5 118565-69-8
118565-77-8 118565-86-9 118565-95-0 118583-32-7 118583-40-7
118583-41-8 118583-48-5 118583-49-6 118628-13-0 118696-35-8
118696-36-9 118696-39-2 118696-42-7 118696-46-1 118696-48-3
118696-49-4 118696-50-7 118696-51-8 118696-52-9 118696-59-6
118696-60-9 118696-61-0 118696-63-2 118696-70-1 118696-72-3
118720-65-3 120414-35-9 120414-36-0 120414-37-1 120414-38-2
120414-45-1 120445-09-2 120445-10-5
(as fervescence agent)

L6 ANSWER 13 OF 13 COPYRIGHT 1992 ACS
AN CA110(19):172990d
TI Prostaglandins E and antiulcer containing compositions containing same
AU Ueno, Ryuzo; Ueno, Ryuji; Kato, Ichie; Oda, Tomio
CS Ueno Fine Chemical Industries, Ltd.
LO Japan
SO Eur. Pat. Appl., 136 pp.
PI EP 284180 A1 28 Sep 1988
DS R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
AI EP 88-300709 28 Jan 1988
PRAI JP 87-18820 28 Jan 1987
JP 87-65352 18 Mar 1987

IC ICM C07C177-00
ICS A61K031-557
SC 26-3 (Biomolecules and Their Synthetic Analogs)
SX 1
DT P
CO EPXXDW
PY 1988
LA Eng
OS MARPAT 110:172990
AN CA110(19):172990d
GI



I



II

AB Prostaglandins E [I; X = (CH2)3, CH2COCH2, CH2CH:CH2, CH2C.tplbond.C; R1 = H, physiol. acceptable cation or protective group, alkyl, PhCH2, hydroxyalkyl; R2 = H, Me; R3 = OH, Me, CH2OH; R4, R5 = H, Me, OH, halo; R6 = alkoxy (un)substituted alkyl, alkenyl; C2-C3 may be double bond; if R1, R2, R4, R5 = H, R6 = Bu, R3 = OH], useful as antiulcer agents without uterine or intestinal constriction or vasodilation, were prepd. PGE1 deriv. II was prepd. in 13 steps from (-)-Corey lactone, Collins oxidn. of which gave an aldehyde which reacted with NaH-treated di-Me (2-oxoheptyl)phosphonate. 13,14-Dihydro-15-oxo-PGE2 Et ester had an ulcer inhibiting ED50 of 1.5 mg/kg in rats, with no intestinal or uterus constricting effects or tracheal relaxation effect; PGE2 with ulcer inhibiting ED50 of 0.5 mg/kg showed intestinal and uterus constriction as well as tracheal relaxation.

IT 118583-18-9P 118583-19-0P 118583-20-3P **118583-22-5P**
(prepn. and reaction of, in prepn. of antiulcer prostaglandins)
IT 118565-22-3P 118565-24-5P 118565-25-6P 118565-26-7P

118565-27-8P 118565-28-9P 118565-31-4P 118565-33-6P
118565-34-7P 118565-35-8P 118565-37-0P 118565-38-1P
118565-42-7P 118565-43-8P **118565-46-1P** 118565-58-5P
118565-63-2P 118565-64-3P 118565-66-5P 118565-69-8P
118565-77-8P 118565-86-9P 118583-14-5P 118583-21-4P
118583-25-8P 118583-26-9P 118583-32-7P 118583-34-9P
118583-40-7P 118583-41-8P 118583-48-5P 118583-49-6P
118607-61-7P 118628-13-0P 118628-14-1P 118628-91-4P
118696-35-8P 118696-36-9P 118696-39-2P 118696-42-7P
118696-44-9P 118696-46-1P 118696-48-3P 118696-49-4P
118696-50-7P 118696-51-8P 118696-52-9P 118696-54-1P
118696-57-4P 118696-58-5P 118696-59-6P 118696-60-9P
118696-61-0P 118696-62-1P 118696-63-2P 118696-70-1P
118696-72-3P 118696-73-4P 118720-65-3P
(prepn. of, as antiulcer agent)

IT 118565-84-7P 118565-85-8P 118565-86-9P **118565-87-0P**
118565-88-1P 118565-89-2P 118565-90-5P 118565-91-6P
118565-92-7P 118565-93-8P 118565-94-9P 118565-95-0P
118565-96-1P 118565-97-2P
(prepn. of, as ulcer inhibitor)

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(FILE 'REGISTRY' ENTERED AT 11:06:36 ON 10 DEC 92)

FILE 'CA' ENTERED AT 11:07:52 ON 10 DEC 92

FILE 'CAPREVIEWS' ENTERED AT 11:10:00 ON 10 DEC 92
L9 1 S L5

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L9 ANSWER 1 OF 1 COPYRIGHT 1992 ACS
AN 92:441791 CApreviews
TI 15-ketoprostaglandins or memory improver
AU Ueno, Takashi; Nagama, Hiroyoshi
CS Ueno Seiyaku Oyo Kenkyusho K. K.
LO Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
PI JP 04187637 A2 6 Jul 1992 Heisei
AI JP 90-319576 21 Nov 1990
IC ICM A61K031-557
SC 63 (Pharmaceuticals)
DT P
CO JKXXAF
PY 1992
LA Japan
AB 15-ketoprostaglandins such as 13,14-dihydro-15-keto-16,16-difluoroprostaglandin E2 (I) are memory improver. I (1-100 .mu.g/kg) administered s.c. to exptl. mice improved the memory as refluxed by the passive avoidance learning behavior. Formulations and prepn. of 15-ketoprostaglandins are presented.
IT RN LIST MAY NOT BE COMPLETE: 32233-41-3; 69222-61-3; 118408-95-0;

118565-93-8; 118583-12-3; 118583-13-4; 118583-21-4; 127545-41-9;
136790-72-2; 136790-73-3; 136790-74-4; 136790-75-5; 136790-76-6;
136790-84-6; 136790-89-1